CLAIMS

A key management system comprising:

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a unit which defines a tree structure assigning plural
5 information receivers to leaves;

a unit which divides the tree structure for each predetermined layer and defines plural subtrees; and

 \boldsymbol{a} unit which assigns key information to each of the plural sub-trees.

The key management system according to claim 1, wherein the unit which assigns key information comprises:

a unit which specifies, for all nodes in the subtrees, a differential subset between a set including all the plural information receivers assigned to the leaves of the subtrees and information receivers assigned to a leaf below a specific node in the subtree;

 $\ensuremath{\mathtt{a}}$ unit which assigns key information to each of the differential subsets; and

a unit which assigns key information assigned to all the differential subsets to which the information receivers belong to each of the plural information receivers.